UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,235	11/06/2001	Seth Lederman		5392

61544 7590 09/21/2009

KAREN GUERRERO
25 ROOSTER HILL RD
PHOENIXVILLE, PA 19460

EXAMINER	
ROYDS, LESLIE A	

ART UNIT	PAPER NUMBER
1614	

MAIL DATE	DELIVERY MODE
09/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/992,235	LEDERMAN ET AL.	
	Examiner	Art Unit	
	LESLIE A. ROYDS	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,25-27 and 30-35* is/are pending in the application.

4a) Of the above claim(s) *25-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 30-35* is/are rejected.

7)☒ Claim(s) *33 and 35* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-8, 25-27 and 30-35 are presented for examination.

Applicant's Amendment filed May 29, 2009 has been received and entered into the present application.

Claims 1-8, 25-27 and 30-35 remain pending. Claims 25-27 remain withdrawn from consideration pursuant to 37 C.F.R. 1.142(b). Claim 25 is cancelled. Claims 32-35 are newly added.

Applicant's arguments, filed May 29, 2009, have been fully considered. Rejections not reiterated from previous Office Actions are hereby withdrawn. The following rejections and objections are either reiterated or newly applied. They constitute the complete set of rejections and objections presently being applied to the instant application.

Objection to the Claims (New Grounds of Objection)

Claims 33 and 35 are objected to for failing to conclude with a period.

Claim Rejections - 35 USC § 112, First Paragraph, Written Description Requirement, New Matter (New Grounds of Rejection)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 32-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In particular, the specification and claims as originally filed fail to provide adequate written

description for the newly added limitations directed to (1) wherein the pharmaceutical composition is administered at a dosage that is not about 0.1 mg/kg nor about 10 mg/kg (claims 32 and 34) and (2) wherein the pharmaceutical composition is administered at a dosage of about 1 mg/kg (claims 33 and 35).

Applicant fails to direct the Examiner to the portions of the instant specification that allegedly provide adequate written description for the newly presented limitations in instant claim 32-35. However, the specification and claims as originally filed have been fully and carefully considered, and the disclosure found in Example 4 (p.27-34) appears to be the most relevant description pertaining to newly added claims 32-35.

Example 4 is directed to a study of amphetaminil sulfate, amphetamine and fusaric acid on locomotor activity and induction of stereotyped behavior in normal rats. Specifically, the disclosure states, "Male Wistar rats (n=4 per group) were randomly allocated to each drug treatment group. Drugs were administered such that, with the exception of fusaric acid, each rat in each group received all doses of the drug or vehicle in a semi random manner according to the modified Latin Square in Table 1. Compounds were administered at the doses: 0.1, 1 and 10 mg/kg s.c. in 100% DMSO (vehicle). Amphetamine was administered at 0.1, 1 and 5 mg/kg s.c. in saline (vehicle). Fusaric acid was administered at 20, 40 and 80 mg/kg s.c. in saline (vehicle). Rats received each dose of fusaric acid (20, 40 and 80 mg/kg), doses given in order, starting with vehicle. A one-week interval was provided between doses." (para. bridging p.27-28)

However, the disclosure of the administration of the instantly claimed compound (R,R'),(R,S')-amphetaminil in amounts of 0.1 mg/kg, 1 mg/kg and 10 mg/kg s.c. in 100% DMSO vehicle fails to provide adequate written support to now broaden the claims to read on amounts of "about" 0.1, 1 or 10 mg/kg, wherein the term "about" would permit variation above and below the specified dosages of 0.1, 1 and 10 mg/kg (which is a broadening of the originally disclosed amounts of 0.1, 1 and 10 mg/kg). This is a concept that is not adequately supported by the written description of the invention as provided in the

specification and claims as originally filed because the disclosure of "0.1 mg/kg", "1 mg/kg" or "10 mg/kg" does not provide adequate support to then broaden the claims to read upon the use of the same compound in an amount of *"about* 0.1 mg/kg", *"about* 1 mg/kg" or *"about* 10 mg/kg" as now recited in newly added claims 32-35. These newly added limitations represent a broadening of the subject matter both claimed and disclosed in the specification and claims as originally filed that is not adequately supported, either explicitly or implicitly, by the original disclosure and clearly circumscribes a concept that was not in Applicant's possession at the time of the invention. Note also that the disclosure of using (R,R'),(R,S')-amphetaminil in an amount of 0.1 mg/kg, 1 mg/kg and 10 mg/kg in 100% DMSO vehicle also does not provide adequate written description to use this same amount of the claimed amphetaminil compound in *any pharmaceutically acceptable carrier, diluent, excipient or additive*. This is because the disclosure of this specific amount of amphetaminil in a particular vehicle (i.e., 100% DMSO) does not provide adequate support to then claim the same amount of amphetaminil in combination with *any pharmaceutically acceptable carrier, diluent, excipient or additive per se*.

As stated in MPEP §2163, "The subject matter of the claim need not be described literally (i.e., using the same terms of *in haec verba*) in order for the disclosure to satisfy the description requirement." However, considering the teachings provided in the specification as originally filed, Applicant has failed to provide the necessary teachings, by described the claimed invention in such a way as to reasonably convey to one skilled in the relevant art that Applicant had possession of the concepts of (1) wherein the pharmaceutical composition is administered at a dosage that is not about 0.1 mg/kg nor about 10 mg/kg (claims 32 and 34) and (2) wherein the pharmaceutical composition is administered at a dosage of about 1 mg/kg (claims 33 and 35).

Accordingly, the claims are considered to lack sufficient written description and are properly rejected under 35 U.S.C. 112, first paragraph.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8, 30-32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salvesen et al. ("NMR and ORD Determination of the Configuration of the N-Cyanobenzylamphetamine (AN 1)" *Aezneim-Forsch. (Drug Res.)*, 1974; 24(2):137-140), in light of STN Registry File No. 17590-01-1 ("Amphetaminil", 2008) and Stedman's Medical Dictionary (Twenty-Second Edition, 1972; p.377), each cited to show facts, in view of Remington's Pharmaceutical Sciences (Sixteenth Edition, 1980; p.420-425), each already of record, for the reasons of record set forth at p.3-10 of the previous Office Action dated April 9, 2009, of which said reasons are herein incorporated by reference.

Newly added claims 32 and 34 are properly included in the instant rejection because the determination of the optimal dosage amount would have been a matter well within the skill of the artisan at the time of the invention and would not have required undue experimentation or have been outside the realm of knowledge generally available to the skilled artisan. Factors that would have been taken into consideration when making such a determination would have included, but not been limited to, the age,

body weight, symptoms, desired therapeutic effect, route of administration, duration of treatment, etc. Other factors that would have been considered would have included the sex, diet and medical condition of the patient, severity of the disease, pharmacological considerations, e.g., activity, efficacy, pharmacokinetics and toxicology profiles of the particular compound employed, whether a drug delivery system is utilized and whether the compound is administered as part of a drug combination, among others. Thus, the dosage amount of the instantly claimed composition that would have actually been employed would have been expected to vary widely and, in the absence of evidence to the contrary, would not have been inconsistent with that which is presently claimed, absent factual evidence to the contrary.

Response to Applicant's Arguments

Applicant traverses the instant rejection, stating that the results are commensurate with the scope of the instant claims. Applicant argues that the instant claims are directed to a therapeutically effective amount of (R,R')(R,S')-amphetaminil to elicit the effects of increased activity and fewer side effects and alleges that a dose of about 0.1 mg/kg or a dose of about 10 mg/kg is not a therapeutically effective amount for the purpose of the instant invention and "the range the Applicants intend to cover by a therapeutically effective amount is doses of about 1 mg/kg." Still further, Applicant opines that the selection of salts, carriers, diluents, excipients and mode of administration does not affect the outcome of the obviousness analysis.

Applicant's traversal has been fully and carefully considered, but fails to be persuasive.

Firstly, Applicant argues that the results are commensurate in scope with the instant claims. This is unpersuasive. For the variety of reasons described at p.3-10 of the previous Office Action dated April 9, 2009, the results are not commensurate in scope with the claimed subject matter. In view of the fact that Applicant has failed to provide any additional evidence or present any other persuasive arguments

responding to the reasons described at p.3-10 of the previous Office Action, it is respectfully maintained that the allegedly unexpected results *are not* commensurate in scope with the instantly claimed subject matter.

Secondly, Applicant insists that "the range the Applicants intend to cover by a therapeutically effective amount is doses of about 1 mg/kg." However, this feature of a therapeutically effective amount of "about 1 mg/kg" upon which Applicant relies to distinguish the instant claims over the cited prior art is not recited in the rejected claim(s). In addition, not only are the instant claims unlimited to a particular amount (see, e.g., instant claim 1, which only requires a "therapeutically effective amount" of the claimed amphetaminil compound), but various dependent embodiments of the claims recite particular mg amounts of amphetaminil for which Applicant has failed to provide any evidence of unexpected activity so as to support his contention that the instantly claimed invention distinguishes over the cited prior art. Accordingly, this allegation that the claims are somehow implicitly limited to "about 1 mg/kg" amounts of the claimed amphetaminil compound is unimpressive. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Lastly, Applicant's argument that the selection of salts, carriers, diluents, excipients and mode of administration does not affect the outcome of the obviousness analysis has been considered, but fails to remedy the fact that the instantly claims are not limited to the particular embodiment(s) that were demonstrated as being unexpected. Applicant is again reminded that, should he rely upon unexpected results to patentably distinguish over the prior art, the present claimed must be limited to the embodiment(s) which is (are), in fact, unexpected. Note also that Applicant is burdened with the responsibility of explaining why the evidence provided to support secondary considerations is probative of non-obviousness beyond what data is explicitly provided as unexpected. Please see MPEP §716.02(b)[R-2], particularly Section (II), which states, "[A]ppellants have the burden of explaining the

data in any declaration they proffer as evidence of non-obviousness." *Ex parte Ishizaka*, 24 USPQ2d 1621, 1624 (Bd. Pat. App. & Inter. 1992). In the instant case, though the instant data was provided in the instant specification and not a declaration, the burden is nonetheless on Applicant to explain the data provided as evidence of non-obviousness of the claimed subject matter.

In view of the reasons provided *supra*, the evidence supporting the obviousness of the instantly claimed invention outweighs the remarks provided to support the non-obviousness of the instantly claimed invention. Therefore, the rejection stands.

For these reasons, and those previously made of record at p.3-10 of the Office Action dated April 9, 2009, rejection of claims 1-8, 30-32 and 34 is proper.

Conclusion

Rejection of claims 1-8 and 30-35 is proper.

Claims 25-27 remain withdrawn from consideration pursuant to 37 C.F.R. 1.142(b).

No claims of the present application are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Royds whose telephone number is (571)-272-6096. The examiner can normally be reached on Monday-Friday (9:00 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571)-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leslie A. Royds/
Patent Examiner, Art Unit 1614

September 14, 2009

/Ardin Marschel/
Supervisory Patent Examiner, Art Unit 1614